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TO  
ABSTRACTS  
AND  
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1957





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## Symbols used in the Index

(A) Abstract, (B) Book Review, (C) Note of Correction, (D) Discussion

## Abbreviations used in the Index

a.c.	= alternating current	c.w.	= continuous wave
d.c.	= direct current	i.c.w.	} = modulated c.w.
h.v.	= high voltage	m.c.w.	
l.v.	= low voltage	s.w.*	= short wave
a.f.	= audio frequency	u.s.w.*	= ultra short wave
i.f.	= intermediate frequency	$\lambda$	= wavelength
r.f.	= radio frequency, including :—	c.r.	= cathode ray
v.l.f.	= very low frequency, < 30 kc/s	c.r.o.	= cathode ray oscilloscope
l.f.	= low frequency, 30-300 kc/s	d.f.	= direction finding
m.f.	= medium frequency, 300-3000 kc/s	e.m.	= electromagnetic, <i>but</i>
h.f.	= high frequency, 3-30 Mc/s	e.m.f.	= electromotive force
v.h.f.	= very high frequency, 30-300 Mc/s	a.f.c.	= automatic frequency control
u.h.f.	= ultra high frequency, > 300 Mc/s	a.g.c.	= automatic gain control
a.m.	= amplitude modulation	a.p.h.c.	= automatic phase control
f.m.	= frequency modulation	a.v.c.	= automatic volume control
p.m.	= pulse modulation, including :—	m.u.f.	= maximum usable frequency
p.a.m.	= pulse amplitude modulation	p.p.i.	= plan position indicator
p.c.m.	= pulse code modulation	s.s.b.	= single sideband
p.f.m.	= pulse frequency modulation	d.s.b.	= double sideband
p.ph.m.	= pulse phase modulation	s.w.r.	= standing wave ratio
p.p.m.	= pulse position modulation	v.f.o.	= variable frequency oscillator
p.w.m.	= pulse width modulation	R/T	= radiotelephony
ph.m.	= phase modulation	W/T	= wireless telegraphy
v.m.	= velocity modulation	TV	= television

\* No clearly defined limits



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## IN PAPERS ABSTRACTED

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2960 of 1956	Jan. 1957, Vol. 45, No. 1, p. 65
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## A

**Acta physica austriaca**, Springer Verlag, Wien I, Mölkerbastei 5, Austria. (*Acta phys. austriaca*)  
**Acta Polytechnica**, Royal Swedish Academy of Engineering Sciences, Publishing Office, Box 5073, Stockholm 5, Sweden. (*Acta polyt., Stockholm*)  
**Acustica**, S. Hirzel Verlag, Stauffacherquai 40, Zürich 1, Switzerland. (*Acustica*)  
**Advances in Physics**, Taylor & Francis Ltd, Red Lion Court, Fleet Street, London, E.C.4, England. (*Advances Phys.*)  
**Akusticheski Zhurnal**, Moscow B-64, Podolskii per., 21, U.S.S.R. (*Akust. Zh.*)  
**Akustische Beihette**, as for *Acustica*. (*Akust. Beihette*)  
**Alta Frequenza**, Associazione Elettrotecnica Italiana, Milano (202), Via S. Paolo 10, Italy. (*Alta Frequenza*)  
**Annales der Physik**, J. A. Barth, Leipzig C1, Salomonstrasse 18B, Germany. (*Ann. Phys., Lpz.*)  
**Annales de Géophysique**, Service des Publications du C.N.R.S., 19 Quai Anatole France, Paris 7<sup>e</sup>, France. (*Ann. Géophys.*)  
**Annales de Géophysique**, Masson & Cie, 120 Boulevard Saint-Germain, Paris 6<sup>e</sup>, France. (*Ann. Phys., Paris*)  
**Annales de Radioélectricité**, 10 rue Carducci, Paris 19<sup>e</sup>, France. (*Ann. Radioélect.*)  
**Annales des Télécommunications**, 3 & 5 Boulevard Pasteur, Paris 15<sup>e</sup>, France. (*Ann. Télécommun.*)  
**Annali di Geofisica**, Istituto Nazionale di Geofisica, Università, Roma, Italy. (*Ann. Geofis.*)  
**Applied Scientific Research**, Martinus Nijhoff, Lange Voorhout 9, The Hague, Netherlands. (*Appl. Sci. Res.*)  
**Archiv der elektrischen Übertragung**, S. Hirzel Verlag, Stuttgart, Germany. (*Arch. elektr. Übertragung*)  
**Archiv für Elektrotechnik**, Springer Verlag, Berlin W35, Reichpietschstr. 20, Germany. (*Arch. Elektrotech.*)  
**Archiv für Meteorologie Geophysik und Bioklimatologie**, Series A, Springer Verlag, Wien I, Mölkerbastei 5, Austria. (*Arch. Met., Wien*)  
**Archiv für technischen Messen**, R. Oldenbourg KG, München 8, Rosenheimer Str. 145, Germany. (*Arch. tech. Messen*)  
**Archivum Elektrotechniki**, Warszawa, ul. Koszykowa 75, Polyechnika, Zaklad Elektroniki PAN, Poland. (*Archivum Elektrotech.*)  
**Arkiv för Fysik**, published for Royal Swedish Academy of Sciences by Almqvist & Wiksell, Boktryckeri A.B., Stockholm, Sweden. (*Ark. Fys.*)  
**A.T.E. Journal**, Automatic Telephone & Electric Co., Strower Works, Liverpool 7, England. (*A.T.E. J.*)  
**Audion**, Radio Magazines, Inc., P.O. Box 629, Mineola, N.Y., U.S.A. (*Audion*)  
**Australian Journal of Applied Science**, Commonwealth Scientific and Industrial Research Organization, 314 Albert Street, East Melbourne C.3, Victoria, Australia. (*Aust. J. appl. Sci.*)

**Australian Journal of Physics**, as for Australian Journal of Applied Science. (*Aust. J. Phys.*)  
**Automatika i Telemekhanika**, Moscow, Leningradskoe shosse, 9, U.S.S.R. (*Automatika i Telemekhanika*)  
**A.W.A. Technical Review**, Amalgamated Wireless (Australasia) Ltd, Sydney, Australia. (*A.W.A. tech. Rev.*)

## B

**B.B.C. Engineering Division Monographs**, British Broadcasting Corporation, 35 Marylebone High Street, London, W.1, England. (*B.B.C. Engng Div. Monographs*)  
**Beams Journal**, British Electrical and Allied Manufacturers' Association, 36 Kingsway, London, W.C.2, England. (*Beams J.*)  
**Bell Laboratories Record**, 463 West Street, New York 14, N.Y., U.S.A. (*Bell Lab. Rec.*)  
**Bell System Technical Journal**, American Telephone and Telegraph Company, 195 Broadway, New York 7, N.Y., U.S.A. (*Bell Syst. tech. J.*)  
**British Communications & Electronics**, Heywood & Co. Ltd, Drury House, Russell Street, Drury Lane, London, W.C.2, England. (*Brit. Comm. Electronics*)  
**British Journal of Applied Physics**, 47 Belgrave Square, London, S.W.1, England. (*Brit. J. appl. Phys.*)  
**Brown Boveri Review**, Baden, Switzerland. (*Brown Boveri Rev.*)  
**Bulletin de l'Académie des Sciences de l'U.R.S.S.**, (a) série physique, (b) série géophysique, (c) classe sciences techniques, (in Russian), Academy of Sciences, Moscow, M. Kharitonovskii per., 4, U.S.S.R. (*Bull. Acad. Sci. U.R.S.S.*, (a) sér. phys., (b) sér. géophys., (c) tech. Sci.)  
**Bulletin de l'Association Suisse des Electriciens**, Seefeldstrasse 301, Zürich 8, Switzerland. (*Bull. suisse. elektrotech. Ver.*)  
**Bulletin of the Technical University Istanbul**, Istanbul Teknik Üniversitesi, Gümbürpazı, Istanbul, Turkey. (*Bull. tech. Univ. Istanbul*)

## C

**Cables & Transmission**, Sotelec, 16 rue de la Baume, Paris 8<sup>e</sup>, France. (*Cables & Transm.*)  
**Cahiers de Physique**, 165 rue de Sévres, Paris 15<sup>e</sup>, France. (*Cah. Phys.*)  
**Canadian Journal of Chemical Engineering**, formerly Canadian Journal of Technology, The Chemical Institute of Canada, 18 Rideau Street, Ottawa 2, Ont., Canada. (*Canad. J. chem. Engng*)

**Canadian Journal of Physics**, National Research Council, Ottawa 2, Ont., Canada. (*Canad. J. Phys.*)  
**Canadian Journal of Technology**, as for Canadian Journal of Physics. (*Canad. J. Technol.*)  
**Chalmers tekniska Högskolas Handlingar**, N. J. Gumperts Förlag, Göteborg, Sweden. (*Chalmers tech. Högsk. Handl.*)  
**Communication and Electronics**, American Institute of Electrical Engineers, 20th and Northampton Streets, Easton, Pa, U.S.A. (*Commun. & Electronics*)  
**Communications on Pure and Applied Mathematics**, Interscience Publishers Inc., 250 Fifth Avenue, New York 1, N.Y., U.S.A. (*Commun. pure appl. Math.*)  
**Comptes Rendus (Doklady) de l'Académie des Sciences de l'U.R.S.S.**, (in Russian), Moscow B-64, Podolskii per., 21, U.S.S.R. (*C.R. Acad. Sci. U.R.S.S.*)  
**Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences**, Gauthier-Villars, 55 Quai des Grands-Augustins, Paris 6<sup>e</sup>, France. (*C.R. Acad. Sci., Paris*)

## E

**Electrical Communication**, International Telephone and Telegraph Corporation, 67 Broad Street, New York 4, N.Y., U.S.A. (*Elect. Commun.*)  
**Electrical Engineering**, American Institute of Electrical Engineers, 33 West 39th Street, New York 18, N.Y., U.S.A. (*Elect. Engng. N.Y.*)  
**Electrical Journal**, Boulevard Haussmann, 144 Fleet Street, London, E.C.4, England. (*Elect. J.*)  
**Electrical Manufacturing**, 1250 Sixth Avenue, New York 20, N.Y., U.S.A. (*Elect. Mfg.*)  
**Electrical Review**, Dorset House, Stamford Street, London, S.E.1, England. (*Elect. Rev., Lond.*)  
**Electronic & Radio Engineer**, formerly Wireless Engineer, Hiffe & Sons Ltd, Dorset House, Stamford Street, London, S.E.1, England. (*Electronic Radio Eng.*)  
**Electronic Application Bulletin**, N.V. Philips' Gloeilampenfabrieken, Technical and Scientific Literature Department, Suite 1, Eindhoven, Netherlands. (*Electronic Applic. Bull.*)  
**Electronic Engineering**, 28 Essex Street, London, W.C.2, England. (*Electronic Engng*)  
**Electronic Equipment**, Sutton Publishing Company, Inc., 172 South Broadway, White Plains, N.Y., U.S.A. (*Electronic Equipm.*)  
**Electronic Industries & Tele-Tech**, formerly Tele-Tech & Electronic Industries, Chestnut & 56th Sts, Philadelphia 39, Pa, U.S.A. (*Electronic Ind. Tele-Tech*)  
**Electronics**, 330 West 42nd Street, New York 36, N.Y., U.S.A. (*Electronics*)  
**Elektronische Rundschau**, Verlag für Radio-Foto-Kinotechnik G.m.b.H., Berlin-Borsigwalde, Eichbomdamm 141-167, Germany. (*Elektronische Rundschau*)

**Elektrosvyas'**, Moscow, K-9, ul. Gorkogo 7, 8-1 pod'ezd, 31 etazh, U.S.S.R. (*Elektrosvyas'*)  
**Elektrotechnik und Maschinenbau**, Journal of the Elektrotechnischer Verein Österreichs, Springer Verlag, Wien I, Mölkerbastei 5, Austria. (*Elektrotech. u. Maschinenb.*)  
**Elektrotechnische Zeitschrift**, Edition A & B, VDE-Verlag G.m.b.H., Berlin-Charlottenburg 2, Bismarckstrasse 33, Germany. (*Elektrotech. Z.*)  
**Endeavour**, Imperial Chemical Industries, North Block, Thames House, Millbank, London, S.W.1, England. (*Endeavour*)  
**Engineer**, 28 Essex Street, London, W.C.2, England. (*Engineer, Lond.*)  
**Engineering**, 35 & 36 Bedford Street, London, W.C.2, England. (*Engineering, Lond.*)  
**Ericsson Review**, Telefonaktiebolaget L.M. Ericsson, Stockholm 32, Sweden. (*Ericsson Rev.*)  
**Ericsson Technica**, as for Ericsson Review. (*Ericsson Tech.*)

## F

**Frequenz**, Verlag Schlele & Schön, Berlin S.W.29, Hoppstrasse 10, Germany. (*Frequenz*)  
**Funk-Technik**, Verlag für Radio-Foto-Kinotechnik G.m.b.H., Berlin-Borsigwalde, Eichbomdamm 141-167, Germany. (*Funk-Technik, Berlin*)

## G

**G.E.C. Journal**, General Electric Company Ltd, Magnet House, Kingsway, London, W.C.2, England. (*G.E.C. J.*)  
**G.E.C. Telecommunications**, General Electric Company Ltd, Coventry, England. (*G.E.C. Telecommun.*)  
**General Electric Review**, General Electric Company, 1 River Road, Schenectady 5, N.Y., U.S.A. (*Gen. Elect. Rev.*)  
**General Radio Experimenter**, General Radio Company, 275 Massachusetts Avenue, Cambridge 38, Mass., U.S.A. (*Gen. Radio Exp.*)  
**Geofisica Pura e Applicata**, Istituto Geofisico Italiano, Milano, Piazza Leonardo da Vinci 15, Italy. (*Geofis. Pura appl.*)

## H

**Helvetica Physica Acta**, Journal of the Société



Suisse de Physique, Editions Birkhäuser, Bâle 10, Switzerland. (*Helv. Phys. Acta*)  
**Hochfrequenztechnik und Elektronikaustik**, Akademische Verlagsgesellschaft Geest & Portig K.G., Leipzig C1, Sternwartenstr. 8, Germany. (*Hochfrequenztech. u. Elektronikaustik*)

## I

**IBM Journal of Research and Development**, International Business Machines Corporation, 590 Madison Avenue, New York 22, N.Y., U.S.A. (*IBM J. Res. Develop.*)  
**Indian Journal of Physics** (and Proceedings of the Indian Association for the Cultivation of Science), Jadavpur, Calcutta 32, India. (*Indian J. Phys.*)

## J

**Journal of the Acoustical Society of America**, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*J. acoust. Soc. Amer.*)

**Journal of the American Ceramic Society**, 20th and Northampton Streets, Easton, Pa, U.S.A. (*J. Amer. ceram. Soc.*)

**Journal of Applied Physics**, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*J. appl. Phys.*)

**Journal of Atmospheric and Terrestrial Physics**, Pergamon Press Ltd, 4 & 5 Fitzroy Square, London, W.1, England. (*J. atmos. terr. Phys.*)

**Journal of the Audio Engineering Society**, P.O. Box 12, Old Chelsea Station, New York 11, N.Y., U.S.A. (*J. audio Engng. Soc.*)

**Journal of the British Institution of Radio Engineers**, 9 Bedford Square, London, W.C.1, England. (*J. Brit. Instn Radio Engrs*)

**Journal of the Electrochemical Society**, 1860 Broadway, New York 23, N.Y., U.S.A. (*J. electrochem. Soc.*)

**Journal of Electronics**, see Journal of Electronics and Control. (*J. Electronics*)

**Journal of Electronics and Control**, formerly Journal of Electronics, Taylor and Francis Ltd, Red Lion Court, Fleet Street, London, E.C.4, England. (*J. Electronics Control*)

**Journal of the Franklin Institute**, Benjamin Franklin Parkway at Twentieth Street, Philadelphia 3, Pa, U.S.A. (*J. Franklin Inst.*)

**Journal of Geomagnetism and Geolectricity**, Society of Terrestrial Magnetism and Electricity of Japan, Geophysical Institute, Kyoto University, Kyoto, Japan. (*J. Geomag. Geoelct.*)

**Journal of Geophysical Research**, 5241 Broad Branch Road, N.W., Washington 15, D.C., U.S.A. (*J. geophys. Res.*)

**Journal of the Indian Institute of Science**, Indian Institute of Science, Bangalore 3, India. (*J. Indian Inst. Sci.*)

**Journal of the Institute of Navigation**, John Murray Ltd, 50 Abchurch Lane, London, W.1, England. (*J. Inst. Nav.*)

**Journal of the Institution of Telecommunication Engineers**, Post Box 481, New Delhi, India. (*J. Instn Telecomm. Engrs, India*)

**Journal of Mathematics and Physics**, Massachusetts Institute of Technology, Cambridge 39, Mass., U.S.A. (*J. Math. Phys.*)

**Journal of the Optical Society of America**, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*J. opt. Soc. Amer.*)

**Journal of the Physical Society of Japan**, Maruzen Publishing Co., P.O. Box 605 Central, Tokyo, Japan. (*J. phys. Soc. Japan*)

**Journal de Physique et le Radium**, 12 place Henri-Bergson, Paris 8<sup>e</sup>, France. (*J. Phys. Radium*)

**Journal of the Radio Research Laboratories**, Ministry of Postal Services, Kokubunji P.O., Kitatama-gun, Tokyo, Japan. (*J. Radio Res. Labs. Japan*)

**Journal of Research of the National Bureau of Standards**, U.S. Government Printing Office, Washington 25, D.C., U.S.A. (*J. Res. nat. Bur. Stand.*)

**Journal of Scientific Instruments**, 47 Belgrave Square, London, S.W.1, England. (*J. sci. Instrum.*)

**Journal of the Society of Motion Picture and Television Engineers**, 55 West 42nd Street, New York 36, N.Y., U.S.A. (*J. Soc. Mot. Pict. Telev. Engrs*)

**Journal of the Television Society**, 164 Shaftesbury Avenue, London, W.C.2, England. (*J. Telev. Soc.*)

## M

**Marconi Review**, Marconi House, Chelmsford, England. (*Marconi Rev.*)

**Metal Industry**, Iiffe & Sons Ltd, Dorset House, Stamford Street, London, S.E.1, England. (*Metal Ind., Lond.*)

**Metalurgia**, 31 King Street West, Manchester 3, England. (*Metalurgia, Manchester*)

**Meteorological Magazine**, Her Majesty's Stationery Office, York House, Kingsway, London, W.C.2, England. (*Meteor. Mag., Lond.*)

**Microtecnic**, 23 Avenue de la Gare, Lausanne, Switzerland. (*Microtecnic*)  
**Modern Plastics**, 575 Madison Avenue, New York 22, N.Y., U.S.A. (*Mod. Plast.*)  
**Monthly Notices of the Royal Astronomical Society**, Burlington House, London, W.1, England. (*Mon. Not. R. astr. Soc.*)  
**Mullard Technical Communications**, Mullard House, Torrington Place, London, W.C.1, England. (*Mullard tech. Commun.*)

## N

**Nachrichtentechnik**, V.E.B. Verlag Technik, Berlin C2, Oranienburger Str. 13/14, Germany. (*Nachricht.*)

**Nachrichtentechnische Zeitschrift**, Vieweg & Sohn, Braunschweig, Burgplatz 1, Germany. (*Nachrichtentech. Z.*)

**Nature**, Macmillan & Co. Ltd, St. Martin's Street, London, W.C.2, England. (*Nature, Lond.*)

**Naturwissenschaften**, Springer Verlag, Berlin W35, Reichpietschstr. 20, Germany. (*Naturwissenschaften*)

**Note Recensioni e Notizie**, formerly Piccole Note—Recensioni e Notizie, Istituto Superiore delle Poste e delle Telecomunicazioni, Viale Trastevere 189, Roma, Italy. (*Note Recensioni e Notizie*)

**Nucleonica**, 330 West 42nd Street, New York 36, N.Y., U.S.A. (*Nucleonica*)

**Nuovo Cimento**, Editore Nicola Zanichelli, Bologna, Via Invernici 34, Italy. (*Nuovo Cim.*)

## O

**Observatory**, Royal Greenwich Observatory, Herstmonceux Castle, Hailsham, Sussex, England. (*Observatory*)

**Onde électrique**, 40 rue de Seine, Paris 6<sup>e</sup>, France. (*Onde électr.*)

**Optik**, Wissenschaftliche Verlagsgesellschaft m.b.H., Stuttgart 1, Postfach 40, Germany. (*Optik Stuttgart*)

## P

**Philips Research Reports**, N.V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. (*Philips Res. Rep.*)

**Philips Technical Review**, for Philips Research Reports. (*Philips tech. Rev.*)

**Philips Telecommunication Review**, formerly Communication News, Philips Telecommunications Industries, Hilversum, Netherlands. (*Philips Telecomm. Rev.*)

**Philosophical Magazine**, Taylor and Francis Ltd, Red Lion Court, Fleet Street, London, E.C.4, England. (*Phil. Mag.*)

**Philosophical Transactions of the Royal Society**, Burlington House, Piccadilly, London, W.1, England. (*Phil. Trans.*)

**Physica**, Lucas Bolwerk 4, Utrecht, Netherlands. (*Physica*)

**Physical Review**, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*Phys. Rev.*)

**The Physics and Chemistry of Solids**, Pergamon Press Ltd, 4 & 5 Fitzroy Square, London, W.1, England. (*Phys. Chem. Solids*)

**Piccole Note—Recensioni e Notizie**, Istituto Superiore delle Poste e delle Telecomunicazioni. See Note Recensioni e Notizie. (*Piccole Note. Ist. super. Poste e Telecomunicazioni*)

**Point to Point Telecommunications**, Communications Division, Marconi's Wireless Telegraph Co. Ltd, Chelmsford, England. (*Point to Point Telecomm.*)

**Post Office Electrical Engineers' Journal**, Engineer-in-Chief's Office, Alder House, Aldersgate Street, London, E.C.1, England. (*P.O. elect. Engrs' J.*)

**Poste e Telecomunicazioni**, Roma, Via delle Vite 107, Italy. (*Poste e Telecomunicazioni*)

**Priroda**, Moscow, M. Kharitonovskiy per. 4, U.S.S.R. (*Priroda, Moscow*)

**Proceedings of the Cambridge Philosophical Society** (Mathematical and Physical Sciences), Cambridge University Press, Bentley House, 200 Euston Road, London, N.W.1, England. (*Proc. Camb. phil. Soc.*)

**Proceedings of the Institute of Radio Engineers**, East 78th Street, New York 21, N.Y., U.S.A. (*Proc. Inst. Radio Engrs*)

**Proceedings of the Institution of Electrical Engineers**, Parts A, B and C, Savoy Place, London, W.C.2, England. (*Proc. Instn. elect. Engrs*)

**Proceedings of the Institution of Radio Engineers**, Australia, Science House, 157 Gloucester Street, Sydney, N.S.W., Australia. (*Proc. Instn. Radio Engrs. Aust.*)

**Proceedings of the National Electronics Conference**, 84 East Randolph Street, Chicago, Illinois, U.S.A. (*Proc. nat. Electronics Conf., Chicago*)

**Proceedings of the Physical Society**, 1 Lower Gardens, Prince Consort Road, London, S.W.7, England. (*Proc. Inst. Radio Engrs*)

England. (*Proc. phys. Soc.*)  
**Proceedings of the Royal Society**, Burlington House, Piccadilly, London, W.1, England. (*Proc. roy. Soc.*)  
**Progress of Theoretical Physics**, The Publication Office, Yukawa Hall, Kyoto University, Kyoto, Japan. (*Progr. theor. Phys.*)  
**Het PTT-Bedrijf**, Centrale Directie PTT, Kortenaarskade 12, 's-Gravenhage, Netherlands. (*PTT-Bedrijf*)

## Q

**QST**, American Radio Relay League Inc., 38 La Salle Street, West Hartford 7, Conn., U.S.A. (*QST*)

**Quarterly of Applied Mathematics**, Brown University, Providence 12, R.I., U.S.A. (*Quart. appl. Math.*)

**Quarterly Journal of Mathematics**, Oxford University Press, Amen House, London, E.C.4, England. (*Quart. J. Math.*)

**Quarterly Journal of Mechanics and Applied Mathematics**, Oxford University Press, Amen House, London, E.C.4, England. (*Quart. J. Mech. appl. Math.*)

**Quarterly Journal of the Royal Meteorological Society**, 49 Cromwell Road, London, S.W.7, England. (*Q. J. R. met. Soc.*)

## R

**Radio**, Izdatel'stvo DOSAAF, Moscow, B-66, Novorizanskaya ul. 26, U.S.S.R. (*Radio, Moscow*)

**Radio & Television News**, see Radio & TV News. (*Radio & Telev. News*)

**Radio & TV News**, formerly Radio & Television News, Ziff-Davis Publishing Company, 366 Madison Avenue, New York 17, N.Y., U.S.A. (*Radio & TV News*)

**Radio-Electronic Engineering**, Ziff-Davis Publishing Company, 366 Madison Avenue, New York 17, N.Y., U.S.A. (*Radio-Electronic Engng*)

**Radiotekhnika**, Wien VI, Mariahilferstrasse 71, Austria. (*Radiotekhnika*)

**Radiotekhnika**, Moscow, Chistoprudny Bulvar, 2, U.S.S.R. (*Radiotekhnika, Moscow*)

**Radiotekhnika i Elektronika**, Moscow K-9, Mokhovaya 11, U.S.S.R. (*Radiotekhnika i Elektronika*)

**RCA Review**, RCA Laboratories Division, Princeton, N.J., U.S.A. (*RCA Rev.*)

**Referativnyi Zhurnal**, *Fizika*, Moscow, D-219, Batiskiy pos. 42 B, U.S.S.R. (*Referativnyi Zh. Fiz.*)

**Report of Ionosphere Research in Japan**, Kokusai Bunken Printing Co. Ltd, No. 10, 1-chome, Fujimi-cho, Chiyoda-ku, Tokyo, Japan. (*Rep. Ionosphere Res. Japan*)

**Reports of the Electrical Communication Laboratory**, Nippon Telegraph and Telephone Public Corporation, 1551 Kichijoji, Musashino-shi, Tokyo, Japan. (*Rep. elct. Commun. Lab., Japan*)

**Reports on Progress in Physics**, The Physical Society, 1 Lower Gardens, Prince Consort Road, London, S.W.7, England. (*Rep. Progr. Phys.*)

**Research**, Butterworth's Scientific Publications Ltd, 88 Kingsway, London, W.C.2, England. (*Research, Lond.*)

**Review of Scientific Instruments**, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*Rev. sci. Instrum.*)

**Reviews of Modern Physics**, American Institute of Physics, 335 East 45th Street, New York 17, N.Y., U.S.A. (*Rev. mod. Phys.*)

**Revista de Telecomunicación**, Palacio de Comunicaciones, Madrid, Spain. (*Rev. Telecomunicación, Madrid*)

**Revista Española de Electrónica**, Apartado 5252, Barcelona, Spain. (*Rev. española Electrónica*)

**Revista Telefonica Electronica**, Arbo Editores, Buenos Aires, Argentina. (*Rev. telegr. Electronica, Buenos Aires*)

**Revue générale de l'Électricité**, 12 place Henri Bergson, Paris 8<sup>e</sup>, France. (*Rev. gén. Elect.*)

**Revue HF**, 55 rue Defacqz, Brussels, Belgium. (*Rev. HF, Brussels*)

**Revue d'Optique**, 3 & 5 Boulevard Pasteur, Paris 15<sup>e</sup>, France. (*Rev. d'Optique*)

**Ricerca scientifica**, Roma, Piazza della Libertà 10, Italy. (*Ricerca sci.*)

**R.S.G.B. Bulletin**, New Ruskin House, 28 Little Russell Street, London, W.C.1, England. (*R.S.G.B. Bull.*)

**Rundfunktechnische Mitteilungen**, formerly Technische Hausmittelungen des Nordwestdeutschen Rundfunks, H. H. Nölke Verlag, Hamburg 20, Hegestrasse 40, Germany. (*Rundfunktech. Mitt.*)

## S

**Schweizer Archiv für angewandte Wissenschaft und Technik**, Buchdruckerei Vogt-Schild AG, Solothurn, Switzerland. (*Schweiz. Arch. angew. Wiss. Tech.*)

**Science Reports of the Research Institutes**, Tohoku University, Series A and B, Tohoku University, Sendai, Japan. (*Sci. Rep. Res. Inst.*)

Tohoku Univ.)  
**Scientific Monthly**, 10 McGovern Avenue, Lancaster, Pa, U.S.A. (*Sci. Mon.*)  
**Short Wave Magazine**, 55 Victoria Street, London, S.W.1, England. (*Short Wave Mag.*)  
**Slaboproudy Obzor**, Praha II, Krakovská 8, Czechoslovakia. (*Slab. Obs., Prague*)  
**Sylvania Technologist**, Sylvania Electric Products Inc., Sylvania Center, Bay Side, N.Y., U.S.A. (*Sylvania Technologist*)

## T

**Technical News Bulletin of the National Bureau of Standards**, U.S. Government Printing Office, Washington 25, D.C., U.S.A. (*Tech. News Bull. nat. Bur. Stand.*)

**Technische Hausmittelungen des Nordwestdeutschen Rundfunks**, see Rundfunktechnische Mitteilungen. (*Tech. Hausmitt. Nordwest. Rd-funks*)

**Technische Mitteilungen PTT**, Journal of the Swiss Post Office, Bern, Spiezergasse 5, Switzerland. (*Tech. Mitt. schweiz. Post-Teleph. Verw.*)

**Telefunken Zeitung**, Telefunken G.m.b.H., Berlin S.W.61, Mehringdamm 32-34, Germany. (*Telefunken Ztg*)

**Tele-Tech & Electronic Industries**, see Electronic Industries & Tele-Tech. (*Tele-Tech & Electronic Ind.*)

**Télévision**, 9 rue Jacob, Paris 6<sup>e</sup>, France. (*Télévision*)

**Tellus**, Lindhagensgatan 124, Stockholm, Sweden. (*Tellus*)

**Tijdschrift van het Nederlands Radiogenootschap**, Jagtlaan 9, Santpoort-Station, Netherlands. (*Tijdschr. nat. Radiogenoot.*)

**TMC Technical Journal**, Hollingsworth Works, Dulwich, London, S.E.21, England. (*TMC tech. J.*)

**Toute la Radio**, 9 rue Jacob, Paris 6<sup>e</sup>, France. (*Toute la Radio*)

**Transactions of the American Geophysical Union**, 1530 P Street, N.W., Washington 5, D.C., U.S.A. (*Trans. Amer. geophys. Union*)

**Transactions of the Institute of Radio Engineers**, 1 East 78th Street, New York 21, N.Y., U.S.A. (*Trans. Inst. Radio Engrs*)

**Transactions of the South African Institute of Electrical Engineers**, The Associated Scientific and Technical Societies of South Africa, P.O. Box 5907, Johannesburg, South Africa. (*Trans. S. Afr. Inst. elect. Engrs*)

**TSF et TV**, 40 rue de Seine, Paris 6<sup>e</sup>, France. (*TSF et TV*)

## U

**Uspekhi Fizicheskikh Nauk**, Moscow, B-71, B. Kaluzhskaya 15 (Gostekhnizdat), U.S.S.R. (*Uspekhi fiz. Nauk*)

## V

**Le Vide**, Journal of the Société française des Ingénieurs Techniciens du Vide, 44 rue de Rennes, Paris 6<sup>e</sup>, France. (*Le Vide*)

## W

**Weather**, 49 Cromwell Road, London, S.W.7, England. (*Weather*)

**Wireless Engineer**, see Electronic & Radio Engineer. (*Wireless Engr.*)

**Wireless World**, Iiffe & Sons Ltd, Dorset House, Stamford Street, London, S.E.1, England. (*Wireless World*)

## Z

**Zeitschrift für angewandte Mathematik und Physik**, Editions Birkhäuser, Bâle 10, Switzerland. (*Z. angew. Math. Phys.*)

**Zeitschrift für angewandte Physik**, Springer Verlag, Berlin W35, Reichpietschstr. 20, Germany. (*Z. angew. Phys.*)

**Zeitschrift für Metallkunde**, Dr. Riederer-Verlag G.m.b.H., Stuttgart, Marienstrasse 82, Germany. (*Z. Metallkde.*)

**Zeitschrift für Meteorologie**, Akademieverlag G.m.b.H., Berlin N.W.7, Schiffbauerdamm 19, Germany. (*Z. Met.*)

**Zeitschrift für Naturforschung**, Tübingen, Postfach 81, Germany. (*Z. Naturf.*)

**Zeitschrift für Physik**, Springer Verlag, Berlin W35, Reichpietschstr. 20, Germany. (*Z. Physik*)

**Zhurnal eksperimental'noi i teoreticheskoi fiziki**, Moscow, V-133, Kaluzhskoe shosse 32, U.S.S.R. (*Zh. eksp. i teor. fiz.*)

**Zhurnal tekhnicheskoi fiziki**, Leningrad, 164, V.O., Mendelevskaya lin., 1, U.S.S.R. (*Zh. tekhn. fiz.*)